

Diagnostic Field Form

ND Department of Commerce/DCS

SFN 59251 (5/10)

Name				Job#				Date					
BLOWER DOOR TEST DATA & BLOWER DOOR GUIDED AIR SEALING (WCEG)													
Test Conditions:				Baseline pressure: Pa				Door Opening Used:					
Test		CFM₅₀				CEG/100 CFM₅₀ = \$							
Initial Test				No. in Crew		Minutes		CFM ₅₀ Reduction		Cost / 100 CFM ₅₀			
Test 1													
Test 2													
Test 3													
Test 4													
Test 5													
Final Test								Building Tightness Limit =					
ZONE PRESSURE TESTING (ZPT)													
Zone:		Test 1		Test 2		Zone:		Test 1		Test 2			
House/Zone, P ₁						House/Zone, P ₁							
Zone/Outside, P ₁						Zone/Outside, P ₁							
Hole Added		H/Z or Z/O		H/Z or Z/O		Hole Added		H/Z or Z/O		H/Z or Z/O			
Hole in ² or Door-Open CFM ₅₀						Hole in ² or Door-Open CFM ₅₀							
House/Zone, P ₂						House/Zone, P ₂							
Zone/Outside, P ₂						Zone/Outside, P ₂							
CFM ₅₀ House/Zone						CFM ₅₀ House/Zone							
CFM ₅₀ Zone/Outside						CFM ₅₀ Zone/Outside							
CFM ₅₀ Total Path						CFM ₅₀ Total Path							
DUCTWORK LEAKAGE/AIR HANDLER ASSESSMENT													
Room-to-Room Pressure Testing								Duct Leakage to Outdoors (Test at 25 Pascals Positive)					
#	Room	Test 1	Test 2	#	Room	Test 1	Test 2			Test 1	Test 2		
1				6				Test pressure		Pa	Pa		
2				7				Flow ring used (circle one)		Open, 1, 2, 3	Open, 1, 2, 3		
3				8				Fan pressure		Pa	Pa		
4				9				Fan flow (leakage to outdoors)		CFM	CFM		
House to Outside pressure:								Inches ² leakage to outdoors		in ²	in ²		
If a room is more than 3 Pascals different from main body of house, relieve pressure.								CFM leakage as percentage of conditioned floor area		%	%		
Does a fireplace or woodstove draw any portion of its combustion air from a zone that is depressurized more than -3 Pascals WRT outside? If so, relieve pressure.													
PRESSURE PAN TESTING AND LEAKAGE ASSESSMENT										Pressure Pan Multipliers, M*			
#	Room	M*	Test 1	M*	Test 2	#	Room	M*	Test 1	M*	Test 2	Pre Total	Post Total
1	Furnace					8							
2						9							
3						10							
4						11							
5						12							
6						13							
7						14							

Duct Leakage Standards (refer to Field Standards for details)

11921 Mobile Homes

1. If there is a belly return system in the mobile home, convert it to a living-space return system.
2. Inspect the duct work visually and then seal all penetrations in the duct trunk line, boots, and seal the ends of the duct run.
3. When the above duct sealing work is completed conduct a pressure pan test on all duct registers including the furnace plenum.
4. If the sum of the pressure pan readings is greater than either 6 or an average of .7 per register (whichever is higher), the furnace plenum and branch ducts must also be accessed and sealed.
5. If the sum of the pressure pans readings is either 6 or an average of .7 per register (whichever is higher), or less and all penetrations in the duct trunk line (boots, end of trunk line, visible penetrations) with the exception of the furnace plenum connection, the task may be considered acceptable.
6. The duct blaster may also be used to test the duct work. If this procedure is used, the task may be considered complete if the cfm leakage to the outside (measured at 25 pa) is less than 7% of the total floor space. (Example; if a mobile home is 14X66, the area is 924 sq. ft. The duct blaster reading must be less than 7% of the floor area of 924, or 64.7 cfm)
7. The ideal leakage is 0 pa and 0 cfm leakage to the outside. The above is only the acceptable limits. We should strive to reduce all leakage as much if possible.

11922 Site-Built Homes, Including Manufactured Housing

1. For ducts located in unconditioned spaces:
 - a) Try to convert or alter space so that it is conditioned. If it cannot be converted continue with b & c: b) Use duct blower to determine duct leakage to outdoors: c) repair, seal, and insulate ducts to at least R-8: d) Goal is to reduce duct leakage to the outdoors, as measured with duct blower and blower door, to 7 percent of floor area.
2. For ducts located in conditioned spaces:
 - a) Always repair disconnected ducts: b) preferred to seal and insulate space envelope rather than ducts: c) perform zone pressure diagnostics on space (house-to-zone pressure should be 20 Pascals or less).